WEST Search History

DATE: Monday, July 15, 2002

Set Name side by side	Query	Hit Count	Set Name result set
	DB=USPT; PLUR=YES; OP=ADJ		
L17	l13 and stalk [clm]	18	L17
L16	l13 and very good early growth	0	L16
L15	relative maturity adj5 85	1	L15
L14	relative maturity near 85	4	L14
L13	very high yield and (corn or maize)	215	L13
L12	39k40 and (maize or corn)	0	L12
L11	L10 and l8 and l6 and l4 and l2	1	L11
L10	L9 and (maize or corn)	83	L10
L9	aluerone color adj5 yellow	83	L9
L8	L7 and (maize or corn)	222	L8
L7	cob color adj5 red	222	L7
L6	L5 and (maize or corn)	57	L6
L5	silk color adj5 red	57	L5
L4	L3 and (maize or corn)	119	L4
L3	glume color adj5 light green	119	L3
L2	L1 and (maize or corn)	72	L2
L1	anther color adj5 red	94	L1

END OF SEARCH HISTORY

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TERMINAL (ENTER 1, 2, 3, OR ?):2

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NEWS 1		Web Page URLs for STN Seminar Schedule - N. America
NEWS 2	Jan 25	BLAST(R) searching in REGISTRY available in STN on the Web
NEWS 3	Jan 29	FSTA has been reloaded and moves to weekly updates
NEWS 4	Feb 01	DKILIT now produced by FIZ Karlsruhe and has a new update frequency
NEWS 5	Feb 19	Access via Tymnet and SprintNet Eliminated Effective 3/31/02
NEWS 6	Mar 08	Gene Names now available in BIOSIS
NEWS 7	Mar 22	TOXLIT no longer available
NEWS 8	Mar 22	TRCTHERMO no longer available
NEWS 9	Mar 28	US Provisional Priorities searched with P in CA/CAplus and USPATFULL
NEWS 10	Mar 28	LIPINSKI/CALC added for property searching in REGISTRY
NEWS 11	Apr 02	PAPERCHEM no longer available on STN. Use PAPERCHEM2 instead.
NEWS 12	Apr 08	"Ask CAS" for self-help around the clock
NEWS 13	Apr 09	BEILSTEIN: Reload and Implementation of a New Subject Area
NEWS 14	Apr 09	ZDB will be removed from STN
NEWS 15	Apr 19	US Patent Applications available in IFICDB, IFIPAT, and IFIUDB
NEWS 16	Apr 22	Records from IP.com available in CAPLUS, HCAPLUS, and ZCAPLUS
NEWS 17	Apr 22	BIOSIS Gene Names now available in TOXCENTER
NEWS 18	Apr 22	Federal Research in Progress (FEDRIP) now available
NEWS 19	Jun 03	New e-mail delivery for search results now available
NEWS 20	Jun 10	MEDLINE Reload
NEWS 21	Jun 10	PCTFULL has been reloaded
NEWS 22	Jul 02	FOREGE no longer contains STANDARDS file segment

NEWS EXPRESS	February 1 CURRENT WINDOWS VERSION IS V6.0d, CURRENT MACINTOSH VERSION IS V6.0a(ENG) AND V6.0Ja(JP), AND CURRENT DISCOVER FILE IS DATED 05 FEBRUARY 2002
NEWS HOURS	STN Operating Hours Plus Help Desk Availability
NEWS INTER	General Internet Information
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NEWS PHONE	Direct Dial and Telecommunication Network Access to STN
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FILE 'HOME' ENTERED AT 09:05:57 ON 15 JUL 2002

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=> file agricola biosis
COST IN U.S. DOLLARS                                    SINCE FILE      TOTAL
                                                           ENTRY    SESSION
FULL ESTIMATED COST                                         0.21       0.21

FILE 'AGRICOLA' ENTERED AT 09:06:07 ON 15 JUL 2002

FILE 'BIOSIS' ENTERED AT 09:06:07 ON 15 JUL 2002
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=> s very high yield and (corn or maize)
L1            4 VERY HIGH YIELD AND (CORN OR MAIZE)

=> s l1 and stability
L2            0 L1 AND STABILITY

=> s l1 and stalk?
L3            0 L1 AND STALK?

=> s l1 and early growth
L4            0 L1 AND EARLY GROWTH

=> s l1 and (northweast or northcentral or northeast)
L5            0 L1 AND (NORTHWEAST OR NORTHCENTRAL OR NORTHEAST)

=> s l1 and (relative maturity (10w) 85)
L6            0 L1 AND (RELATIVE MATURITY (10W) 85)

=> s 39k40 and (corn or maize)\
MISSING OPERATOR MAIZE)\
The search profile that was entered contains terms or
nested terms that are not separated by a logical operator.

=> s 39k40 and (corn or maize)
L7            0 39K40 AND (CORN OR MAIZE)

=>
=> s early growth and (maize or corn)
L8          283 EARLY GROWTH AND (MAIZE OR CORN)

=> s l8 and stability
L9            4 L8 AND STABILITY

=> d 1-4 ti

L9   ANSWER 1 OF 4  AGRICOLA
TI   Is seedling root morphology predictive of seasonal accumulation of shoot
     dry matter in maize?

L9   ANSWER 2 OF 4  BIOSIS  COPYRIGHT 2002 BIOLOGICAL ABSTRACTS INC.
TI   Ridge tillage for corn and soybean production: Environmental
     quality impacts.

L9   ANSWER 3 OF 4  BIOSIS  COPYRIGHT 2002 BIOLOGICAL ABSTRACTS INC.
TI   Is seedling root morphology predictive of seasonal accumulation of shoot
     dry matter in maize.

L9   ANSWER 4 OF 4  BIOSIS  COPYRIGHT 2002 BIOLOGICAL ABSTRACTS INC.
TI   LIGHT INTERCEPTION OF A MAIZE ZEA-MAYS L. HYBRID AS AFFECTED BY
     PLANT POPULATION AND ROW SPACING.


=> d 2-4 ab
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L9 ANSWER 2 OF 4 BIOSIS COPYRIGHT 2002 BIOLOGICAL ABSTRACTS INC.
AB Tillage practices are needed to increase agronomic **stability** and productivity while enhancing the environment. Ridge tillage has been demonstrated as an effective agronomic practice; some have described it as a miniature precision agriculture. Environmental impacts have generally been positive but the results vary, depending upon soil and climatic factors. Ridge tillage changes soil temperature and water patterns compared to no-till and full width - moldboard/chisel plowing or disking for primary tillage. These changes lead to an improved soil environment for crop emergence and **early growth**, because of warmer soil temperatures in cool climates and better water relations in both poorly-drained and moderately well-drained soils. While increased soil water infiltration in the interrow can lead to increased leaching and greater loading of nitrates and herbicides at the bottom of the root zone, controlled studies suggest that ridge tillage with precise agrichemical placement in the ridge can provide a favorable environmental impact. Moreover, the combined herbicide and cultivation for weed control reduces the treated area and overall application for herbicides. Ridge tillage was evaluated at a number of field locations of the Management Systems Evaluation Areas program to assess both agronomic and environmental impacts. A special effort in these ridge tillage evaluations was to trace agrichemical movement from the site of application within the soil and into the surficial aquifer. In most instances, ridge tillage decreased agrichemicals leaching and the negative environmental impact.

L9 ANSWER 3 OF 4 BIOSIS COPYRIGHT 2002 BIOLOGICAL ABSTRACTS INC.
AB Seedling vigor at suboptimal temperatures is an important characteristic in **maize** (Zea mays L.) growth in cool regions. Selection for improved vegetative growth and seasonal dry matter accumulation at suboptimal temperatures would be more efficient if seedling traits related to field performance could be identified under controlled conditions. This study evaluated if root traits of seedlings grown at cool or warm temperature regimes are predictive of **early growth** and silage yield in the field. Twenty early- to medium-late maturing European hybrids (FAO maturity ratings 200-280) were grown in a solid substrate until the third leaf stage under two controlled temperature regimes (25/22.5 degree C and 15/12.5 degree C, day/night) and until silage maturity in three field environments on a Orthic Luvisol soil in Central Germany. The closest relationships with early field growth were found for the total length of the main roots (r = 0.65, P lt 0.01) and total length (r = 0.60, P lt 0.01) and number (r = 0.68, P lt 0.01) of first-order laterals of the seminal roots at 25/22.5 degree C. Silage yield was best correlated with the branching density of the seminal roots (r= 0.66, P lt 0.01) at 15/12.5 degree C and the total root surface area (r = 0.58, P lt 0.01) at 25/225 degree C. These root traits could potentially be used only in combination with other secondary characters for the indirect selection for shoot performance because individual root traits explained less than 50% of the variation in shoot weight in the field. Negative correlations between the chilling **stability** of most seedling traits, as expressed by the relative difference of trait means at 15/12.5 degree C and 25/22.5 degree C, and silage yield indicated that chilling-tolerant genotypes may be less capable of benefiting from the warmer temperatures during later growth stages.

L9 ANSWER 4 OF 4 BIOSIS COPYRIGHT 2002 BIOLOGICAL ABSTRACTS INC.
AB Light interception by canopy is strictly dependent on LAI [leaf area index] and on leaf angle. In **maize**, both parameters are determined by genotypes, but plant population and row spacing are also very important. To study these aspects, a field experiment was carried out in 1986 at the experimental station of the Agronomy Institute of the University of Perugia (Central Italy, 43.degree. N lat., 165 m a.s.l.), to assess light transmission (PARt), interception (PARi) and absorption (PARa) of a **maize** hybrid grown at different plant densities (4,

6, 8, 10 and 12 p m-2) and with two row spacings (50 cm and 75 cm) by using a linear quantum sensor. Plant density enhanced LAI and PARi during the entire plant cycle. Reduced row spacing did not affect LAI and caused an increase in PARi, but it was important only at the 6 and 8 p m-2 densities, while at the other densities there were no or limited differences. After flowering, PARi was not affected by row spacing. In early vegetative stage, but at lower densities (4 to 8 p m-2), PARt was more uniform in the 50 cm than in the 75 cm spacing. In fact, in the 50 cm spacing, PARt at the center of the inter-row space was lower and, on the contrary, it was higher near the rows. However, this behaviour was no longer evident at flowering. Probably the lower irradiance experienced by the plants in the 75 cm spacing during their growth explains the smaller culm diameter observed with this spacing (-21% with respect to the 50 cm spacing). Biomass accumulation until flowering was linearly correlated with cumulated PARa. Differences in angular coefficients (i.e. in efficiencies of PARa conversion to d.m., EC) were observed in relationship to experimental treatments. EC increased with density until 6 p m-2 (0.88 g E-1) in the 75 cm spacing and until 8 p m-2 (0.85 g E-1) in the 50 cm spacing. Independent of plant density, EC was higher in the wider spacing (on the average 0.85 vs 0.81 g E-1). Differences between row spacing on biomass or grain yield were not significant. The maximum grain yields were recorded with 10 p m-2 in both row spacings (14,8 t d.m. ha-1). At complete plant development, PARt was related at LAI by an exponential relationship (PARt (=%)=1-0.825LAI, R2 = 0.944) with no differences due to plant population or row spacing. The absence of differences among treatments in extinction coefficient suggests that treatments have influenced PARa mainly through LAI, with limited effects on leaf angle. In conclusion, the reduction of row spacing seems positive mainly because it increases the amount of PARa during **early growth**, with some agronomic benefits, like increase on plant **stability** or on crop competition against weeds, but with sporadic and limited effects on grain yeld.

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=> d 2-4 so

L9   ANSWER 2 OF 4  BIOSIS  COPYRIGHT 2002 BIOLOGICAL ABSTRACTS INC.
SO   Soil & Tillage Research, (Oct. 2, 1998) Vol. 48, No. 3, pp. 145-154.
     ISSN: 0167-1987.

L9   ANSWER 3 OF 4  BIOSIS  COPYRIGHT 2002 BIOLOGICAL ABSTRACTS INC.
SO   Crop Science, (1997) Vol. 37, No. 4, pp. 1237-1241.
     ISSN: 0011-183X.

L9   ANSWER 4 OF 4  BIOSIS  COPYRIGHT 2002 BIOLOGICAL ABSTRACTS INC.
SO   RIV AGRON, (1989) 23 (3), 255-262.
     CODEN: RAGOAN. ISSN: 0035-6034.


=> s l8 and (northwest or northeast or northcentral)
L10          1 L8 AND (NORTHWEST OR NORTHEAST OR NORTHCENTRAL)

=> d ti

L10  ANSWER 1 OF 1  BIOSIS  COPYRIGHT 2002 BIOLOGICAL ABSTRACTS INC.
TI   EFFECT OF PHOSPHORUS PLACEMENT ON EARLY GROWTH YIELD
     AND PHOSPHORUS ABSORPTION BY IRRIGATED CORN ZEA-MAYS.


=> d ab

L10  ANSWER 1 OF 1  BIOSIS  COPYRIGHT 2002 BIOLOGICAL ABSTRACTS INC.
AB   Traditionally, placement choices for fertilizer P used in corn
     production have been either broadcast and incorporated before planting or
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applied in a band to the side of and below the seed at planting (starter). New concepts of placement of fertilizer P have evolved in recent years. This study was designed to evaluate the effect of placement of fertilizer P, supplied as 10-34-0, on the production of irrigated **corn** (Zea mays, L.) grown on soils with a low or very low level of soil test P. This study was conducted at three irrigated sites in **northeast** Nebraska [USA] in 1981 and 1982. Soil testing experimental sites were representative of the irrigated soils in the region. The four basic placements used were: 1) broadcast, 2) deep band, 3) disked applied and 4) sidedress. Starter P was also evaluated in each of these placements. Plant samples were collected throughout the growing season to monitor the effect of placement on P uptake. Grain yields were also measured. Both **early growth** and grain yields were affected by P placement with side dress application of P generally being inferior to all other placements. Other placements used had an equal effect on **early growth** in yields. None of the placements used were superior to the application of all of the fertilizer P in a starter fertilizer. The P concentration in the young **corn** plants was affected by placement but differences disappeared as the **corn** developed through the growing season. Differences measured early in the season were reflected in grain yield in one of the three experimental sites.

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=> s l8 and relative maturity
L11          0 L8 AND RELATIVE MATURITY

=> s stalk? and (maize or corn)
L12       2692 STALK? AND (MAIZE OR CORN)

=> s l12 and early growth
L13          5 L12 AND EARLY GROWTH

=> dup rem l13
PROCESSING COMPLETED FOR L13
L14           5 DUP REM L13 (0 DUPLICATES REMOVED)

=> d 1-5 ti

L14  ANSWER 1 OF 5  BIOSIS  COPYRIGHT 2002 BIOLOGICAL ABSTRACTS INC.
TI   Relevant traits, genetic variation and breeding strategies in early silage
     maize.

L14  ANSWER 2 OF 5  BIOSIS  COPYRIGHT 2002 BIOLOGICAL ABSTRACTS INC.
TI   AGRONOMIC TRAITS AND NUTRITIVE VALUE OF STOVER IN BROWN MIDRIB-3
     MAIZE HYBRIDS.

L14  ANSWER 3 OF 5  BIOSIS  COPYRIGHT 2002 BIOLOGICAL ABSTRACTS INC.
TI   COMPARISON OF GROWTH OF SUGARCANE SACCHARUM-SP AND MAIZE
     ZEA-MAYS.

L14  ANSWER 4 OF 5  BIOSIS  COPYRIGHT 2002 BIOLOGICAL ABSTRACTS INC.
TI   UTILIZATION AND RE DISTRIBUTION OF ZINC DURING VEGETATIVE GROWTH OF
     CORN.

L14  ANSWER 5 OF 5  AGRICOLA
TI   Fertilizer placement studies on Hillsdale sandy loam soil.


=> d 1-5 so

L14  ANSWER 1 OF 5  BIOSIS  COPYRIGHT 2002 BIOLOGICAL ABSTRACTS INC.
SO   Agronomie (Paris), (Oct., 1997) Vol. 17, No. 8, pp. 395-411.
     ISSN: 0249-5627.
```

L14 ANSWER 2 OF 5 BIOSIS COPYRIGHT 2002 BIOLOGICAL ABSTRACTS INC.
SO J JPN SOC GRASSL SCI, (1989) 35 (3), 220-227.
CODEN: NPSGAI. ISSN: 0447-5933.

L14 ANSWER 3 OF 5 BIOSIS COPYRIGHT 2002 BIOLOGICAL ABSTRACTS INC.
SO ZIMBABWE J AGRIC RES, (1983) 20 (2), 119-127.
CODEN: ZJARDK.

L14 ANSWER 4 OF 5 BIOSIS COPYRIGHT 2002 BIOLOGICAL ABSTRACTS INC.
SO AGRON J, (1978) 70 (2), 243-246.
CODEN: AGJOAT. ISSN: 0002-1962.

L14 ANSWER 5 OF 5 AGRICOLA
SO Journal of the American Society of Agronomy, Sept 1943. Vol. 35, No. 9. p. 747-767
Publisher: Washington, D.C. : The Society, 1913-[1948]
ISSN: 0095-9650